

Notice of Allowability

Application No.

09/380,994

Examiner

Jeremy C. Norris

Applicant(s)

TAKADA ET AL.

Art Unit

2827

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Miscellaneous Letter filed 5 August 2003.
2. ☒ The allowed claim(s) is/are 1-4,7,10,15,18.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

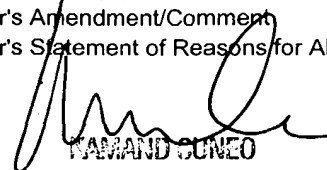
7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☒ CORRECTED DRAWINGS must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☒ including changes required by the proposed drawing correction filed 03 January 2002, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| <ol style="list-style-type: none">1 <input type="checkbox"/> Notice of References Cited (PTO-892)3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)5 <input type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. _____.7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | <ol style="list-style-type: none">2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)4 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____.6 <input type="checkbox"/> Examiner's Amendment/Comment8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance9 <input type="checkbox"/> Other |
|--|--|


YAMAND CONERO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2000

DETAILED ACTION

Allowable Subject Matter

Claims 1-4, 7, 10, 15, and 18 are allowed.

The following is an examiner's statement of reasons for allowance: Examiner is persuaded by Applicants' arguments stating that the Imasu reference is not available as prior art to the instantly claimed invention. Moreover, regarding Applicants arguments submitted 23 June 2002, Examiner finds the arguments relating to claim 1-4 persuasive; agreeing that the Mizumoto reference does not disclose or suggest the claimed invention. Regarding Applicants' arguments relative to claims 7 and 10, while not necessarily agreeing with Applicants, Examiner has nonetheless determined that the set of limitations "covering the walls of the interconnecting through holes with metal plating films; and fusing solder balls against the interconnecting through holes and filling them with solder" in conjunction with the other claimed features was not found to be disclosed in, nor suggested by the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy C. Norris whose telephone number is 703-306-5737. The examiner can normally be reached on Tuesday - Friday, 10am - 7pm.

Application/Control Number: 09/380,994

Page 3

Art Unit: 2827

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on 703-308-1233. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

JCSN